EXPLANATION OF BLOCK MEASUREMENT OF GEAR TEETH

FORMULA

(1) $V = \underbrace{\frac{TTT}{PD}}_{\text{½ RADIAN VALUE OF TTT}} + \text{INV TPA}$

(2) $BTT = \underbrace{B * V}_{TTT_B} \times \underbrace{\frac{\text{SIN NPA}}{\text{SIN TPA}}}_{\text{COS HELIX } \measuredangle \text{ AT B}}$

(IF SPUR GEAR, THIS WOULD = 1)

(3) BLOCK MEASUREMENT OVER (X) TEETH = $BTT + (X-1)\overbrace{NBP}^{TBP \times \frac{\text{SIN NPA}}{\text{SIN TPA}}}$

TERMS

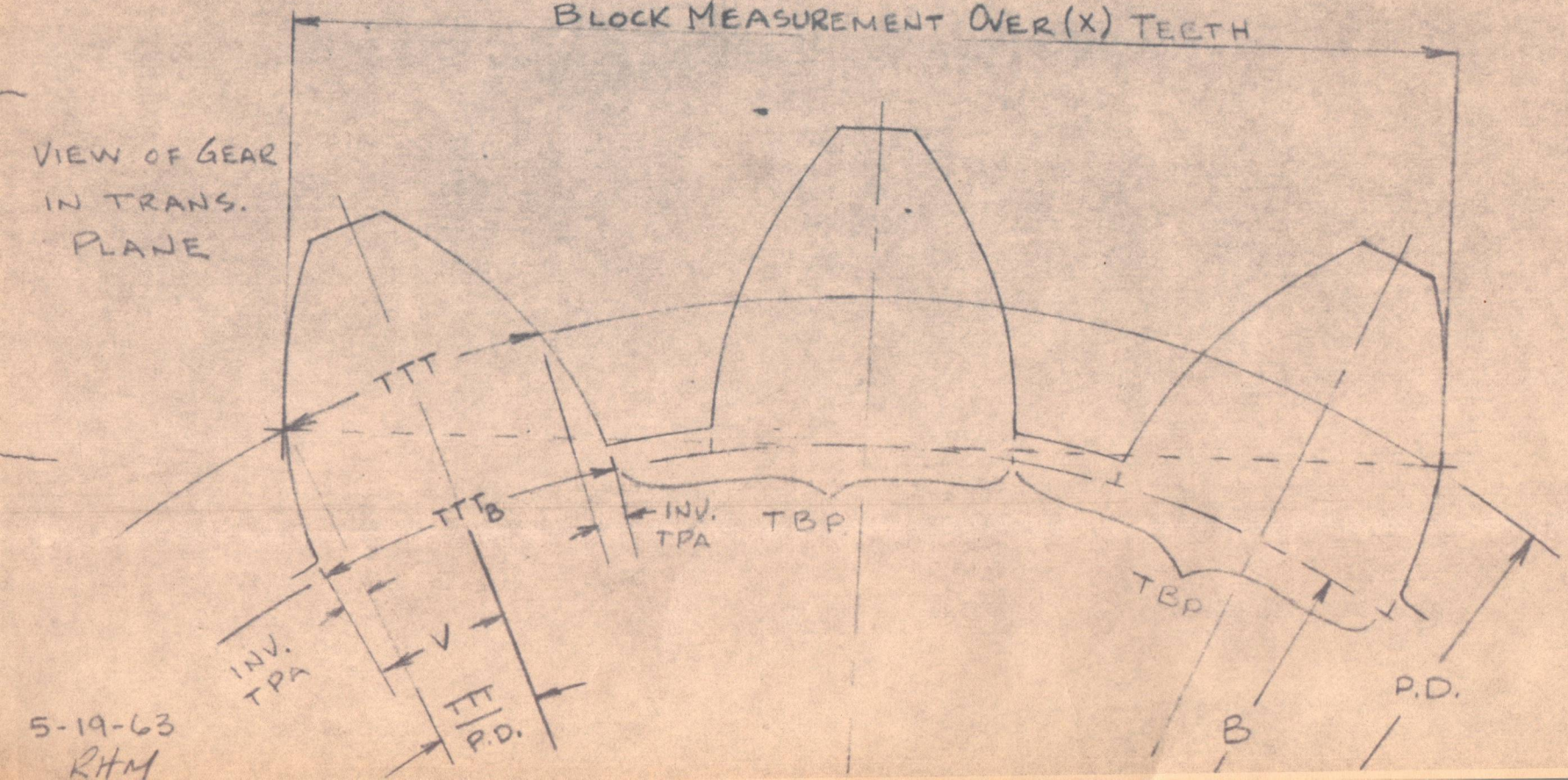
(FOR OTHER TERMS, SEE PAGE # 1)

TTT_B = TRANS. CIR. T.T. AT B

V = ½ RADIAN VALUE OF TTT_B

BTT = NORMAL CIR. T.T. AT B

BLOCK MEASUREMENT OVER (X) TEETH



5-19-63
RHM

FOR SHEET # 3